USGS science for a changing world

GSN

USAID FROM THE AMERICAN PEOPLE

M 7.0, OFF THE EAST COAST OF HONSHU, JAPAN

Origin Time: Sat 2008-07-19 02:39:28 UTC
Location: 37.55°N 142.21°E Depth: 22 km

PAGER
Version 4
Created: 4 days, 18 hrs after earthquake

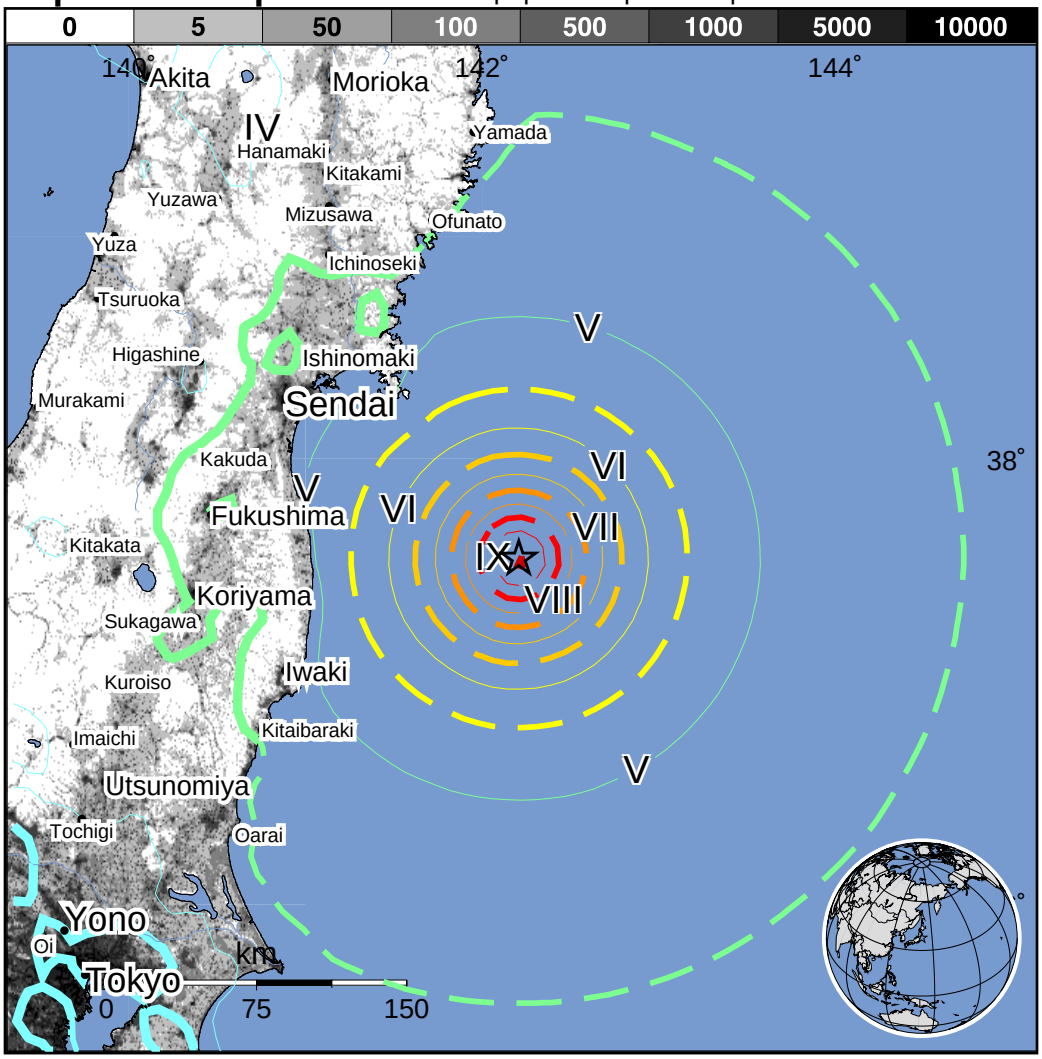
Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k = x1000)		- -*	19,048k*	21,775k*	2,937k	0	0	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	II-III	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING		Not felt	Weak	Light	Moderate	Strong	Very strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	none	none	none	V. Light	Light	Moderate	Moderate/Heavy	Heavy	V. Heavy
	Vulnerable Structures	none	none	none	Light	Moderate	Moderate/Heavy	Heavy	V. Heavy	V. Heavy

*Estimated exposure only includes population within the map area.

Population Exposure

population per ~1 sq. km from Landscan 2006



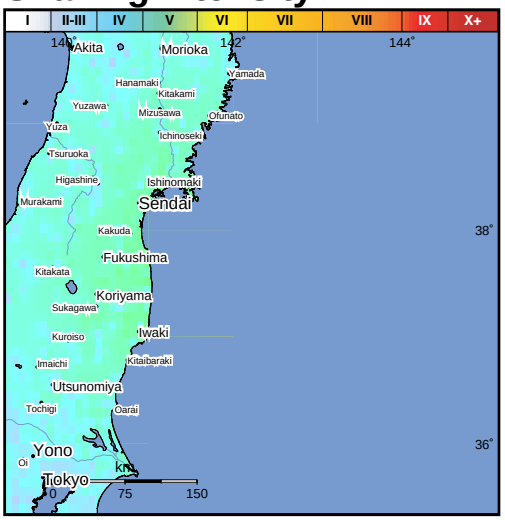
Selected City Exposure

MMI	City	Population
V	Yamoto	32k
V	Wakuya	18k
V	Motomiya	22k
V	Watari	36k
V	Rifu	35k
V	Marumori	16k
IV	**Sendai**	**1,037k**
IV	**Yono**	**1,077k**
III	Kawasaki	1,306k
III	Yokohama	3,574k
III	**Tokyo**	**8,336k**

bold cities appear on map (k = x1000)

Shaking Intensity

MMI



Overall, the population in this region resides in structures that are a mix of vulnerable and earthquake resistant construction. A magnitude 7.6 earthquake and tsunami 67 km Northeast of this one struck Miyagi-Oki, Japan on June 12, 1978 (UTC), with estimated population exposures of 1,303,000 at intensity VIII and 2,557,000 at intensity VII, resulting in an estimated 22 fatalities. On October 23, 2004 (UTC), a magnitude 6.6 earthquake 295 km Northeast of this one struck Niigata, Japan, with estimated population exposures of 481,000 at intensity IX or greater and 386,000 at intensity VIII, resulting in an estimated 67 fatalities. Recent earthquakes in this area have caused, tsunamis, landslides and fires that may have contributed to losses.

This information was automatically generated and has not been reviewed by a seismologist.